#4

PAGE: 1

## RAW SEQUENCE LISTING PATENT APPLICATION US/09/135,988

DATE: 08/24/98 TIME: 15:51:52

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This Raw Listing contains the General Information Section and up to the first 5 pages.

Ţ		SEQUENCE LISTING
2 3	(1)	General Information ENTERE
4 5		(i) APPLICANT: Bryan, Bruce
6		• •
7		(ii) TITLE OF INVENTION: BIOLUMINESCENT ARTICLES OF MANUFACTURE
8 9		(iii) NUMBER OF SEQUENCES: 14
10		
11		(iv) CORRESPONDENCE ADDRESS:
12		(A) ADDRESSEE: Heller Ehrman White & McAuliffe
13		(B) STREET: 4250 Executive Square, 7th Floor
14		(C) CITY: La Jolla
15		(D) STATE: CA
16		(E) COUNTRY: USA
17		(F) ZIP: 92037
18		
19		(v) COMPUTER READABLE FORM:
20		(A) MEDIUM TYPE: Diskette
21		(B) COMPUTER: IBM Compatible
22		(C) OPERATING SYSTEM: DOS
23		(D) SOFTWARE: FastSEQ Version 1.5
24		
25		(vi) CURRENT APPLICATION DATA:
26		(A) APPLICATION NUMBER:
27		(B) FILING DATE:
28		(C) CLASSIFICATION:
29		
30		(vii) PRIOR APPLICATION DATA:
31		(A) APPLICATION NUMBER: 08/757,046
32		(B) FILING DATE: 11-25-96
33		(C) CLASSIFICATION:
34		
35		(vii) PRIOR APPLICATION DATA:
36		(A) APPLICATION NUMBER: 08/597,274
37		(B) FILING DATE: 02-06-96
38		
39		(viii) ATTORNEY/AGENT INFORMATION:
40		(A) NAME: Seidman, Stephanie L
41		(B) REGISTRATION NUMBER: 33,779
42		(C) REFERENCE/DOCKET NUMBER: 24727-105C
43		
44		(ix) TELECOMMUNICATION INFORMATION:
45		(A) TELEPHONE: 619-450-8400
46		(B) TELEFAX: 619-450-8499

## RAW SEQUENCE LISTING PATENT APPLICATION US/09/135,988

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67		(X)	PUB.	LICA.	rion	TNE	JKMA'	LTON	:								
68			D a mi	arm 1		E 4	10 11										
69	PATENT NO.: 5,418,155																
70	(xi) SEOUENCE DESCRIPTION: SEO ID NO:1:																
71		()	<b>Κ</b> Ι) :	ったりい	ENCE	עבאע	CRIP	LTOM	: DE	עד צ	NO:	ı :					
72 73	N C C	mm a	220	N III CI	ACT	maa		C TTTT	יחאים	ርአጥ	CCA	GAA	מאא	λαα	* * *	caa	48
73 74					Thr												40
74 75	1	rea	гÀг	Mec	5	Ser	гуз	vaı	ıyı	10	PIO	GIU	GIII	Arg	15	Arg	
76	1				J					10					13		
70 77	አጥር	אידיא	አረጥ	CCT	CCG	CAG	таа	TCC	acc	AGA	ጥርጥ	λλλ	CAA	λΤС	λλΨ	CTT	96
78					Pro												,,
79	Mec	116	1111	20	110	GIII	111	115	25	AL 9	Oy5	<b></b>	Q11.	30	7.011	*u_	
80				20					20					•			
81	СФФ	СУТ	тсδ	արար	ATT	αат	таπ	πΔπ	САТ	тса	GAA	ΔΔΔ	САТ	GCA	GAA	ААТ	144
82					Ile												
83			35				- , -	40				-,-	45				
84										,							. •
85	GCT	GTT	ATT	ттт	TTA	CAT	GGT	AAC	GCG	GCC	TCT	TCT	TAT	TTA	TGG	CGA	192
86		_			Leu												
87		50					55					60	-		•	•	
88						•											
89	CAT	GTT	GTG	CCA	CAT	ATT	GAG	CCA	GTA	GCG	CGG	TGT	ATT	ATA	CCA	GAT	240
90					His												
91	65					70					75	•				80	
92																	
93	CTT	ATT	GGT	ATG	GGC	AAA	TCA	GGC	AAA	TCT	GGT	AAT	GGT	TCT	TAT	AGG	288
94					Gly												
95					85	•		•	•	90	-		•		95	_	
96																	
97	TTA	CTT	GAT	CAT	TAC	AAA	TAT	CTT	ACT	GCA	TGG	TTG	AAC	TTC	TTA	ATT	336
98	Leu	Leu	Asp	His	Tyr	Lys	Tyr	Leu	Thr	Ala	Trp	Leu	Asn	Phe	Leu	Ile	
99			-	100	-	-	-		105		-			110			

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100 101	шх⊘	CAA	202	202	mc a	mmm	mmm	ama	aca	CAM	CAT	TICC	ОСТ	COTT	mam.	mm.c	384
101		Gln															204
102	1 7 1	GIN	115	ALG	261	rne	rne	120	GLY	111.3	vab	115	125	AIG	Cys	Бец	
104			113					120					123				
105	CCA	TTT	СУШ	πаπ	AGC	πаπ	GAG	ידאיז	CAA	СΔТ	λAG	ልሞሮ	ΔΔΔ	GCA	מידמ	СПП	432
106		Phe															
107	AIG	130	1113	ı yı	Der	1 7 1	135	111.5	OIII	App	Lys	140	Lys	ALG	110	<b>741</b>	
108		.130					133					140					
109	CAC	GCT	GAA	ΔСТ	сπν	GTΔ	САТ	GTG	ΑͲͲ	GAA	TCA	TGG	САТ	GAA	TGG	CCT	480
110																Pro	
111	145	71.10	014			150					155					160	
112																	
113	GAT	ATT	GAA	GAA	GAT	АТТ	GCG	TTG	ATC	AAA	тст	GAA	GAA	GGA	GAA	AAA	528
114		Ile															
115					165					170				2	175	-2	
116																	
117	ATG	GTT	TTG	GAG	AAT	AAC	TTC	TTC	GTG	GAA	ACC	ATG	TTG	CCA	TCA	AAA	576
118		Val															
119				180					185					190		-	
120																	
121	ATC	ATG	AGA	AAG	TTA	GAA	CCA	GAA	GAA	TTT	GCA	GCA	TAT	CTT	GAA	CCA	624
122	Ile	Met	Arg	Lys	Leu	Glu	Pro	Glu	Glu	Phe	Ala	Ala	Tyr	Leu	Glu	Pro	
123			195					200					205				
124																	
125		AAA															672
126	Phe	Lys	Glu	Lys	Gly	Glu	Val	Arg	Arg	Pro	Thr	Leu	Ser	Trp	Pro	Arg '	
127		210					215					220					
128																	
129		ATC															720
130		Ile	Pro	Leu.	Val	-	Gly	Gly	Lys	Pro		Val	Val	Gln	Ile		
131	225					230					235					240	
132								aam				a.m	mm 3	<b>aa</b> .		1 ma	760
133		AAT															768
134	Arg	Asn	Tyr	ASN		Tyr	Leu	Arg	АТА		ASP	Asp	Leu	Pro	_	мет	
135 136					245					250					255		
137	முரு	АТТ	GA A	TOO	CAT	CCA	GGN	ጥጥሮ	முரும்	TCC	አአጥ	CCT	א יוייוי	COUT	GNA	aac	816
138		Ile															010
139	1116	116	GIU	260	тор	FIO	ОТУ	1116	265	Der	ASII	ALG	116	270	014	0+3	
140				200					203					2,0			
141	GCC	AAG	AAG	արդու	ССТ	ልልጥ	ACT	GAA	ጥጥጥ	GTC	AAA	GТA	ΔΔΔ	GGT	СТТ	CAT	864
142		Lys															
143		-1-	275					280			-1-		285	1			
144																	
145	TTT	TCG	CAA	GAA	GAT	GCA	CCT	GAT	GAA	ATG	GGA	AAA	TAT	ATC	AAA	TCG	912
146	Phe	Ser	Gln	Glu	Asp	Ala	Pro	Asp	Glu	Met	Gly	Lys	Tyr	Ile	Lys	Ser	
147		290			-		295	-			-	300	-		-		
148																	
149	TTC	GTT	GAG	CGA	GTT	CTC	AAA	AAT	GAA	CAA	TAA	TTAC	CTTTC	GT T	TTTT:	ATTTA	965
150	Phe	Val	Glu	Arg	Val	Leu	Lys	Asn	Glu	Gln							
151	305					310											
152																	

## RAW SEQUENCE LISTING PATENT APPLICATION US/09/135,988

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														IN.	PUT S	SET: S282	28.raw
153	CAT	TTTT	ccc (	GGGT'	TTAA'	TA A'	TATA.	AATG:	CA'	TTTT	CAAC	AAT'	TTTA	гтт	TAAC'	TGAATA	1025
154																CATATC	1085
155	ATT'	TTGG.	AAT .	ATTA	CCTC	rt t	CAAT	GAAA	TT'	TATA.	AACA	GTG	GTTC	TAA	TAAT'	TAATAT	1145
156	ATA'	TTAT	AAT '	TACA'	PTTG'	IT A'	TGTA.	ATAA	A CT	CGGT'	TTTA	TTA'	TAAA	AAA	A		1196
157																	
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166		,	ii) 1	MOT E	ים זוור	ימעים	E. ~	T) NT N									
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170			(A	) NAI	ME/K	EY: (	Codi	ng Se	eaue	nce							
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172									Cy	prid:	ina l	nilge	endo	cfii	luc	iferase	
173			•	•						_		_			•		
174		(X)	PUB	LICA	rion	INF	ORMA'	TION	<b>;</b>								
175																	
176			PA	PENT	NO.	: E	P 0	387 3	355 '	rora:	Y						
177																	
178																	
179																	
180								ATT									48
181		Lys	Leu	Ile		Leu	Ser	Ile	ITe		Ala	Tyr	Cys	Val		Val	
182	1				5					10					15		
183 184	3 3 C	THOC	a y a	CATE	CCA	mam.	COM	GTA	CAA	COM	CAA	CCA	aaa	пс х	N CITT	202	96
185								Val									. 70
186	AUII	Cys	0111	20	ALU	Cys	110	*41	25	ALU	Olu	ALU	110	30	501	****	
187														-			
188	CCA	ACA	GTC	CCA	ACA	TCT	TGT	GAA	GCT	AAA	GAA	GGA	GAA	TGT	ATC	GAT	144
189								Glu									
190			35				•	40		•	•	_	45	-		-	
191																	
192	ACC	AGA	TGC	GCA	ACA	TGT	AAA	CGA	GAC	ATA	CTA	TCA	GAC	GGA	CTG	TGT	192
193	Thr	Arg	Cys	Ala	Thr	Cys	Lys	Arg	Asp	Ile	Leu	Ser	Asp	Gly	Leu	Cys	
194		50					55					60					
195																	
196								TGC									240
197		Asn	Lys	Pro	СТĀ	-	Thr	Cys	cys	Arg		Cys	GIN	Tyr	Val		
198	65					70					75					80	
199	<b>a.</b> .	шсс	3.03	am s	<b>a.</b>	a a m	aam	003	m a m	White	3.03	N.C.C	mmm	m » ~	acc	***	288
200 201								GGA									200
201	GIU	oer.	AL G	val	85	WTG	WTG	Gly	TÀT	90	wr g	THE	rne.	TAL	95	гìя	
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204	AGA	ТТТ	ААТ	ጥጥጥ	CAG	GAA	CCT	GGT	ΑΑΑ	тат	GTG	СТС	GCT	CGA	GGA	ACC	336
205								Gly									
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206				100					105					110			
207																	
208	AAG	GGT	GGC	GAC	TGG	TCT	GTA	ACC	CTC	ACC	ATG	GAG	AAT	CTA	GAT	GGA	384
209	Lvs	Glv	Gly	Asp	Trp	Ser	Val	Thr	Leu	Thr	Met	Glu	Asn	Leu	Asp	Gly	
210		3	115					120					125		-	-	
211																	
212	CAG	AAG	GGA	GCT	GTA	CTG	ACT	AAG	ACA	ACA	CTG	GAG	GTA	GTA	GGA	GAC	432
213			Gly														
214		130	2				135	-3 -				140			-	•	
215																	
216	GTA	ATA	GAC	ATT	ACT	CAA	GCT	ACT	GCA	GAT	CCT	ATC	ACA	GTT	AAC	GGA	480
217	Val	Ile	Asp	Ile	Thr	Gln	Ala	Thr	Ala	Asp	Pro	Ile	Thr	Val	Asn	Gly	
218	145		•			150				•	155					160	
219																	
220	GGA	GCT	GAC	CCA	GTT	ATC	GCT	AAC	CCG	TTC	ACA	ATT	GGT	GAG	GTG	ACC	528
221			Asp														
222	-		•		165					170			•		175		
223																	
224	ATT	GCT	GTT	GTC	GAA	ATA	CCC	GGC	TTC	AAT	ATT	ACA	GTC	ATC	GAA	TTC	576
225	Ile	Ala	Val	Val	Glu	Ile	Pro	Gly	Phe	Asn	Ile	Thr	Val	Ile	Glu	Phe	
226				180				-	185					190			
227																	
228	TTT	AAA	CTA	ATC	GTG	ATA	GAT	ATT	CTG	GGA	GGA	AGA	TCT	GTG	AGA	ATT	624
229	Phe	Lys	Leu	Ile	Val	Ile	Asp	Ile	Leu	Gly	Gly	Arg	Ser	Val	Arg	Ile	
230		-	195				_	200		_	_	_	205				
231					•												
232	GCT	CCA	GAC	ACA	GCA	AAC	AAA	GGA	CTG	ATA	TCT	GGT	ATC	TGT	GGT	AAT	672
233	Ala	Pro	Asp	Thr	Ala	Asn	Lys	Gly	Leu	Ile	Ser	Gly	Ile	Cys	Gly	Asn	
234		210					215					220					
235																	
236			ATG														720
237	Leu	Glu	Met	Asn	Asp	Ala	Asp	Asp	Phe	Thr	Thr	Asp	Ala	Asp	Gln	Leu	
238	225					230					235					240	
239																	
240			CAA														768
241	Ala	Ile	Gln	Pro		Ile	Asn	Lys	Glu		Asp	Gly	Cys	Pro		Tyr	
242					245					250					255		
243																	
244			CCT														816
245	GTÀ	Asn	Pro		Asp	Ile	GLu	Tyr	-	Lys	GTÀ	Leu	Met		Pro	Tyr	
246				260					265					270			
247															ama	maa	0.54
248			GTA														864
249	Arg	Ala	Val	Cys	Arg	Asn	Asn		Asn	Pne	Tyr	Tyr	_	Thr	Leu	Ser	
250			275					280					285				
251	m~~	~~~	mm~	~~~	m * ~	mam	<b>.</b>		aa.		a	. ~ .	~~m		a. a	ama.	010
252			TTC														912
253	cys		Phe	ΑТЯ	тyr	cys		стλ	стλ	GIU	GIU	-	АТЗ	гÀ2	nlS	val	
254		290					295					300					
255	Omm.	mma	<b>G3.</b> G	mam	amm.	as a	202	maa	aam	003	000	<b>CA</b> 2	3.00	202	003	3.00	060
256 257			GAC Asp														960
257 258		FIIE	ASP	TAL	val		1111	cys	ATG	WTG		GIU	IIII	wrd	стА	320	
258	305					310					315					320	

# **SEQUENCE VERIFICATION REPORT** PATENT APPLICATION *US/09/135,988*

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